

REMARKS

Applicants thank the Examiner for acknowledging receipt of the Information Disclosure Statement filed February 22, 2005 and for consideration of the references therein.

Applicants thank the Examiner for acknowledging Applicants' election without traverse of Species III.

Claim 6 has been amended to incorporate the subject matter of Claim 1. Claim 1 has been canceled. Thus, no new matter has been added. Upon entry of this amendment, which is respectfully requested, Claims 2-20 are pending, of which Claim 2-5 and 7-19 have been withdrawn.

Response to Objection to the Specification

Applicants have reviewed the Examiner's objection to the specification, and made appropriate corrections. Accordingly, withdrawal of the objection is respectfully requested.

Response to Rejections Under § 102

Claim 1 is rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Ito et al. (JP 2001-338912).

Claim 1 is rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Morimoto (JP 2001-077095).

Claim 1 has been canceled, thus the rejections are now moot. Accordingly, withdrawal of the rejections is respectfully requested.

Response to Rejections Under § 103

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ito et al. (JP 2001-338912) or Morimoto (J.P. 2001-077095) in view of Nishijima et al. (JP 06181187).

Nishijima's upper permanent magnet 21 is ring-shaped and arranged such as to surround the upper electrode 16. Likewise, Nishijima's lower permanent magnet 31 is ring-shaped and arranged such as to surround a lower electrode 17. *See*, [0015] and [0016]. These ring-shaped magnets 21 and 31 generate a cylindrical magnetic field extending between the centers of the two magnets, so as to uniformly confine the plasma 44 between the magnets. Further, the ring-shaped magnets 21 and 31 function as a well known Helmholtz coil(s) and the magnetic field generated by the magnets is in a direction parallel to the central axis of the apparatus.

In contrast, according to the present invention, the ring-shaped magnetic field generator 21 is divided into two parts; an upper ring-shaped magnetic field generator, and a lower ring-shaped magnetic field generator. *See*, page 18, lines 11-14. The ring-shaped magnetic field generator 21 is comprised of a plurality of magnetic segments 22a and 22b so as to generate a multi-pole magnetic field whose direction is normal to the axis of the apparatus. *See*, page 10, lines 3-6.

It is understood from the foregoing that the permanent magnets 21 and 31 of Nishijima are constructed differently and function differently as compared to the upper and lower magnetic field generating mechanisms of present Claim 6.

In addition, Nishijima discloses that the location of the upper permanent magnet 21 is adjusted with respect to the upper electrode 16, and the location of the lower permanent magnet 31 is adjusted relative to the lower electrode 17. *See*, paragraphs [0017] and [0063]. Thus, Applicants respectfully submit that the moving mechanisms 22, 32, of Nishijima, do not change the gap between the upper and lower magnetic field generating mechanisms 21 31 vertically, as asserted by the Examiner. That is, the moving mechanisms 22, 32 of Nishijima never control the gap between the upper and lower magnetic field generating mechanisms 21 31.

Accordingly, Applicants respectfully submit that Ito or Morimoto in view of Nishijima fail to render obvious present Claim, 6. Withdrawal of the rejection is respectfully requested.

Claim 20 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ito et al. or Morimoto in view of U.S. Patent No. 6,014,943 to Arami et al. Applicants respectfully traverse.

Applicants respectfully submit that Claim 20 is patentable at least by virtue of its dependence from Claim 6. Accordingly, withdrawal of the rejection is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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